

ABSTRACT OF THE DISCLOSURE

In the series regulator, when an external starting voltage source has started operation, a bias current is supplied from a fourth transistor to a reference voltage circuit, and a reference voltage is supplied from the reference voltage circuit to an amplifier. When an output voltage of a power transistor rises, and a value of a divided voltage applied to a sixth transistor has reached a value of a constant voltage being applied to a fifth transistor, the sixth transistor is turned on, and the fifth transistor is turned off. A tenth transistor starts supplying a bias current to the reference voltage circuit. At the same time, a bias switching circuit starts operation, and interrupts a supply of the bias current from the fourth transistor to the reference voltage circuit.